in a cage and it is not easy for the eye to follow its movements. But to see how the small ichneumon wove the outer coat crosswise, joining it lengthwise and the next coat it wove lengthwise, joining it across the middle, was interesting.

The old luna must be a patient creature as it hangs for days while fifty or more of these active worms come through its skin and weave their nests. If the luna would shake a bit, they would all tumble off, for after the spinning is started they are never closely attached to the host. This big worm is covered with wounds, some of them soon get black, perhaps it feels too sick to be anything but quiet.

N. McMurray, Clearfield, Pennsylvania.

## Occurrence of Morellia podagrica Lw. in North America. (Dip.: Muscidae).

On June 27, 1924, I collected a male of the above European species at Marshfield, Oregon; and on July 25 I collected a male and a female at Summit Station, Montana, at the south

edge of Glacier National Park, altitude 5200 feet.

After identifying the species, being impressed by the wide distance between the two localities, it occurred to me to examine the western material of the common nearctic *Morcllia micans* Mcq. in the National Museum (now including my own western material), to see if the species had not been previously collected, and not noticed. However, I found no mixture of *podagrica* in the collection; the three specimens mentioned are all I know from North America, and it will have to pass as a coincidence that I found it twice on a single western trip after collecting in the West for the greater part of the last thirty years.

The genus Morellia has been discussed and tabulated by Malloch in Annals and Magazine of Natural History, 1923, 520. From Pyrellia it differs in having no ventral bristle on the middle tibia. Our two nearctic species (there are several neotropical) differ in the male by such striking characters that they are very easily separated. In micans the male middle tibia is thickened apically, warped so as to be concave lengthwise behind, and has on its outer edge a row of delicate dense upright cilia, longer near the base; the hind tarsus has on the upper surface a row of upright hairs about twice as long as the thickness of the segments. In podagrica, a noticeably larger species, the tip of the middle femur has a tuft of stout bristles situated on a swelling; the middle tibia is slender at the extreme base, then suddenly expanded into a hump on the outer side at one-sixth its length, which bears numerous small

spiny hairs turned backward. The hump gradually diminishes toward the tip of the tibia, and there are some short, erect, spiny hairs all along the outer edge. The hind tarsus does not have striking hairs above.

The females are not easily separated. I identified my Montana specimen from collecting it with the male and not getting males of micans at the same time. I have seen but one European female, which is extremely like that of our abundant micans. Podagrica was described by Loew in Wiener Ent. Monatsschrift, I. 45, 1852, as a Cyrtoneura.

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## Entomological Literature

COMPILED BY E. T. CRESSON, JR.

Under the above head it is intended to note papers received at the Academy of Natural Sciences, of Philadelphia, pertaining to the Entomology of the Americas (North and South), including Arachnida and Myriopoda. Articles irrelevant to American entomology will not be noted; but contributions to anatomy, physiology and embryology of insects, however, whether relating to American or exotic species will be recorded. The numbers in Heavy-Faced Type refer to the journals, as numbered in the following list, in which the papers are published.

All continued papers, with few exceptions, are recorded only at their first installments.

first installments.

Papers of systematic nature will be found in the paragraph beginning with (N). Those pertaining to Neotropical species only will be found in paragraphs beginning with (S). Those containing descriptions of new forms are preceded by an \*.

For records of Economic Literature, see the Experiment Station Record, Office of Experiment Stations, Washington. Also Review of Applied Entomology, Series A, London. For records of papers on Medical Entomology, see Review of Applied Entomology, Series B.

Papers published in the Entomological News are not listed.

Papers published in the Entomological News are not listed.

4—Canadian Entomologist. 6—Journal, New York Ent. Soc. 7—Annals, Entomological Society of America, 10— Proc., Ent. Soc. Washington. 19—Bull., Brooklyn Ent. Soc. 55—The Pan-Pacific Entomologist, 77—Comptes Rendus, Soc. Biologie, Paris. 78—Bull. Biol. France et de la Belgique. 108—Jour. Washington Acad. Sci. 111—Archiv f. Naturg., Berlin. 133—Jour. Experimental Zool. 135— Ouart, Jour. Microscop, Sci. 154—Zoolog, Anzeiger,

GENERAL.—Baerg, W. J.—Effect of the venom of some supposedly poisonous arthropods of the canal zone.—7, xviii, 471-8. Casey, T. L.—Obituary by F. E. Blaisdell.—55, ii. 90-1. Cushman, R. A.—Location of individual hosts versus systematic relation of host species as a determining factor in parasitic attack.—10, xxviii, 5-6. Herms, W. S.—Entomological observations on Fannings and Washington Islands,